

From wang!elf.wang.com!ucsd.edu!info-hams-relay Fri Apr 12 20:46:18 1991 remote
from tosspot
Received: by tosspot (1.64/waf)
via UUCP; Sat, 13 Apr 91 11:01:12 EST
for lee
Received: from somewhere by elf.wang.com
id aa08353; Fri, 12 Apr 91 20:46:17 GMT
Received: from ucsd.edu by relay1.UU.NET with SMTP
(5.61/UUNET-shadow-mx) id AA22052; Fri, 12 Apr 91 16:27:36 -0400
Received: by ucsd.edu; id AA06871
sendmail 5.64/UCSD-2.1-sun
Fri, 12 Apr 91 11:10:59 -0700 for nixbur!schroeder.pad
Received: by ucsd.edu; id AA06851
sendmail 5.64/UCSD-2.1-sun
Fri, 12 Apr 91 11:10:50 -0700 for /usr/lib/sendmail -oc -odb -oQ/var/spool/
lqueue -oi -finfo-hams-relay info-hams-list
Message-Id: <9104121810.AA06851@ucsd.edu>
Date: Fri, 12 Apr 91 11:10:45 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>
Reply-To: Info-Hams@ucsd.edu
Subject: Info-Hams Digest V91 #292
To: Info-Hams@ucsd.edu

Info-Hams Digest Fri, 12 Apr 91 Volume 91 : Issue 292

Today's Topics:

 "Stray Voltage" on 60 Minutes (2 msgs)
 10m Glass Mount Antenna
 50 to 75 ohm transformer?
 50 to 75 ohm transformer???
 Antenna Matching Gedanken Experiment
 Bangor area canoe races - Call for HAMS to help
 Base antennas for 2m/70cm
 IRV HOFF DEAD
 Most Offensive Scanner
 Pine State Amateur Radio Club annual ham-fest (Bangor area, Maine)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 12 Apr 91 16:15:19 GMT
From: swrinde!zaphod.mps.ohio-state.edu!magnus.acs.ohio-state.edu!csn!pikes!
mercury.cair.du.edu!mnemosyne.cs.du.edu!isis.cs.du.edu!whester@ucsd.edu
Subject: "Stray Voltage" on 60 Minutes
To: info-hams@ucsd.edu

In article <18345@crdgw1.crd.ge.com> mallick@ethiopia (john a mallick) writes:
>In article <9104081906.AA22031@ucsd.edu>, wmartin@stl-06sima (Will Martin)
writes:

>>There was a 60 Minutes segment the night of Sunday, 7 April, that dealt
>>with the problems caused to several dairy farmers by a power-company-
>>caused condition called "stray voltage". Unfortunately, this being mass-
>>market TV, there was absolutely no coherent technical explanation of
>>what they were talking about. They used the "stray voltage" term roughly
>>equivalently to saying "evil vapors" or some other archaic phrase to
>>describe the cause of sickness. Does anyone on the net know the details
>>of what this is all about, and can you post an explanation?

>>

STUFF DELETED..... >

>You might try posting to sci.electronics to get some other opinions,
>but I too saw the program and was curious about just what this "stray
>voltage" was. Power lines don't "wear out", but their insulation will
>fail over time. My suspicion is that the problem relates to faulty
>neutral wiring on somebody's end (either the farmers or the utility).
>If the neutral on your 220 V feedline opens or develops some high
>resistance, the imbalance currents will flow through whatever ground
>they can, like the real ground and any piping that happens to be
>around. I wonder what that stray voltage sniffing instrument was
>measuring?

>

I think your idea about faulty neutral wiring is on the right track...
in fact the National Electrical Code devotes an Article to it.

I have an old 1987 issue of the National Electrical Code Handbook, which
has the text of the Code and additional information added for interpretation
of the Code. Anyway in this book the question of stray voltages is
addressed in Article 547 - Agricultural Buildings. 547-8(b) has a
paragraph on Equipotential Plane...to assure that voltage gradients do
not exist across the ground.

I think a lot of the problem has to do with the fact that feeder circuits
from the main power panel that run to another building with branch
circuits are not supposed to have the neutral bonded to the grounding
conductor at the branch circuit panel. The only bonding point is to

be at the main service point. Of course if the neutral has any resistance in its return path back to the main service, then the current will flow where ever it can find a path...poorly insulated farm equipment which have had the third wire (ground) cut off will be main sources for leakage currents traveling thru the ground (real terra firma).

When leakage is traveling this route, then the current will set up a voltage gradient across the ground and cows will have "stray voltage" across their legs -- which they are sensitive to.

Perhaps before 60 Min. jumped on the power companies they should have consulted a competent electrician or engineer who understands the Code and the theory behind the problem...

All this story did was intill even more fear in the public about electricity and power lines...

--

Bill Hester, Ham Radio N0LAJ, Denver CO., USA | N0LAJ @ W0LJF.CO.USA.NA
Please route replies to: whester@nyx.cs.du.edu or uunet!nyx!whester
Public Access Unix @ University of Denver, Denver Colorado USA
(no official affiliation with the above university)

Date: 11 Apr 91 16:09:41 GMT
From: hpfcso!hpfcdc!perry@hplabs.hpl.hp.com
Subject: "Stray Voltage" on 60 Minutes
To: info-hams@ucsd.edu

>For those of you who've
>never been in a milking parlor, the floor is usually a decent ground, having
>been soaked with various cow effluence, and as a result the floor is a good
>conductor.

>

>-=Paul Flaherty, N9FZX | "Think of it as evolution in action."
>->paulf@shasta.Stanford.EDU | -- Larry Niven and Jerry Pournelle

And all this time, I've been laying radials when I should have been buying cows. Wonder what the neighbors will think.

Perry / KF0CA

Date: 11 Apr 91 12:54:33 GMT
From: dog.ee.lbl.gov!hellgate.utah.edu!cs.utexas.edu!swrinde!elroy.jpl.nasa.gov!

sdd.hp.com!spool.mu.edu!snorkelwacker.mit.edu!bloom-beacon!eru!hagbard!sunic!
mcsun!ukc!strath-cs!str-val!cadp06@
Subject: 10m Glass Mount Antenna
To: info-hams@ucsd.edu

I posted an article along a similar vein to this in rec.radio.cb recently (just hold that spit in your mouth for a moment!), but response has been typically pathetic so...

I am no expert on the subject, so I may appear somewhat ignorant here (excuse me!), but I'm intrigued by a glass-mounted antenna I've seen on sale here in the UK - an antenna which claims to be the only one of its kind in the world - designed to operate on 11m (CB) and, it is claimed, 10m (hence the posting here).

It works on the same principle as some cellular 'phone antennae - an externally mounted section stuck to the glass, coupled to a (for want of a better description) black box mounted on the inside which is attached to the co-ax downlead.

I'm not a regular reader of this news group, so I don't know if this sort of thing has been discussed in the past (probably ad-nauseum, knowing my luck). I know that this type of antenna is available for other bands, but I'm sceptical about the performance of something like this on 10-11m. Has anyone had experience of this antenna (its called the Moonraker Astro Fantom - snappy name, huh!), or anything similar and can comment on its effectiveness or otherwise.

I'm basically facing the usual dilemma of not wanting to bore extra holes in my car bodywork (secondhand buyers in Scotland are particularly sensitive about non-standard apertures on cars on account of all the rain we get here!)

Any advice would be much appreciated before I fork out the necessary 16.95 sterling.

Enrico V Vanni

Date: 12 Apr 91 14:50:42 GMT
From: sdd.hp.com!hp-col!hpctdlb!drn@ucsd.edu
Subject: 50 to 75 ohm transformer?
To: info-hams@ucsd.edu

One of the problems I see in using the 1/2 wave principle for matching the 75 ohm cable to the 50 source is attaching the connector. In his article in _73 Amateur Radio_ July 1989, Edward Krome, KA9LNV, solves both the

impedance matching and the connector attachment problem by using some real easy-to-get materials. For most of us, some type of connector attachment arrangement would have to be fabricated to attach a type N connector to 3/4 inch hardline. Why not incorporate the matching transformers (only 8 inches long at 432) at the same time?

I would be happy to forward a copy of the article if you can not find it in your local library.

73's

Dave Novotny, WA6IFI
drn@hpdctdlb.col.hp.com
719-531-4494

Date: 12 Apr 91 14:39:41 GMT
From: sdd.hp.com!hp-col!hpctdlb!drn@ucsd.edu
Subject: 50 to 75 ohm transformer???
To: info-hams@ucsd.edu

There is a good article about constructing 75 ohm to 50 ohm impedance converters in the July 1989 edition of 73 Amateur Radio. The construction techniques use easy to get materials from your local parts store (N-flange connectors), hardware store (copper pipe), and hobby store (copper tubing). Dimensions are given for 144, 432, 902, and 1296 MHz bands. If you need a copy of the article, E-mail me your address.

73's

Dave Novotny, WA6IFI
drn@hpctdlb.col.hp.com
HP Colorado Telecommunications Division.

Date: 11 Apr 91 16:01:28 GMT
From: hpfcso!hpfcdc!perry@hplabs.hpl.hp.com
Subject: Antenna Matching Gedanken Experiment
To: info-hams@ucsd.edu

It seems we have two camps here:

#1 sez that power hits the bad antenna, bounces back, and fries the finals.

#2 sez that the power doesn't go to the antenna, stays in the transmitter, and fries the finals.

I can't figure out the difference. Either way, you replace the finals.
:-)

In case anyone is counting votes, I support the theory #2. A (good) feedline doesn't consume power, neither does a bad antenna. The power has nowhere to go, and stays bottled up in the finals. Well-designed finals sense the heat rise and turn down the DC input power, reducing the need to dig out the soldering iron.

Perry / KF0CA

Date: 9 Apr 91 19:13:06 GMT
From: swrinde!mips!spool.mu.edu!uwm.edu!bbn.com!nic!mars!gandalf!
gandalf.umcs.maine.edu!steve@ucsd.edu
Subject: Bangor area canoe races - Call for HAMS to help
To: info-hams@ucsd.edu

In the month of April, we have two Bangor Maine area canoe races, and we need your help to make them work!

On April 13, 1991 the Souadabscook race will be held. We are expecting 80-100 boats in this race, and I need up to a dozen HAMS to help out with boat tracking, safety and general communications.

April 20-21 is the date for this years annual Kenduskeag Paddlesport Weekend.

On April 20, the 25th annual Kenduskeg River Race will be held. They tell me that this is one of the largest annual canoe races in the country, and this being the 25th anniversary of the event, it will be certainly the largest Kenduskeg River Race ever. We are expecting as many as 2000 entries in this race, and we need up to 20 HAMS to make this race as enjoyable and safe for everyone involved as it has been in past years.

On April 21, the first annual national war canoe and traditional canoe races will be held on the Penobscot river. We need half a dozen hams for this one.

These races are alot of fun for everyone on both sides of the race.

If you can assist us in this task, or you want some more information on either of the races or what we need people to do, please contact me at any of the addresses below. No experience is necessary, and you

dont' have to be a licensed ham to participate. We have need for non ham operators as well. We have a handfull of indoor (in car) stations as well for those of you who aren't able to be outside in possible bad weather all day.

If you are an out of town HAM, and you are going to be in the area for any of these days, we would love to have you drop by and meet us all (and lend a hand if you can...)

/Steve

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+-----+
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+-----+
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Date: 12 Apr 91 15:29:35 GMT
From: news-mail-gateway@ucsd.edu
Subject: Base antennas for 2m/70cm
To: info-hams@ucsd.edu

The antenna described by Phil Benchoff is one of the class usually known as 'Coaxial collinear' or CoCo. These work extremely well! When building, remember that the lengths of the various sections may have to be changed if you use coax whose velocity factor is different to the coax used by the original designer.

You can keep on adding sections to the middle, improving the gain (by a progressively decrementing amount). The limit is usually when the whole thing becomes too bendy to be self-supporting even when put in a PVC tube.

As a thought, why not use a hollow sailboard mast instead of PVC tube?

But beware - some of these masts are made of Kevlar, which, being a carbon derivative, may be RF-lossy. Anyone tried it?

I dont know about making them dualband 2/70; though the harmonic relationship would tend to suggest that 1/4-wave on 2 is 3/4 wave on 70 so the end impedances might just be OK.

Of course, you can always go out and spend your dollars on buying a commercial dualband collinear, but its not half as much *FUN* as hacking it yourself.

Pete Lucas PJML@UK.AC.NWL.IA G6WBJ@GB7SDN.GBR.EU

Date: 11 Apr 91 19:08:30 GMT
From: ucdavis!csusac!sactoh0!ijpc!ianj@ucbvax.berkeley.edu
Subject: IRV HOFF DEAD
To: info-hams@ucsd.edu

niemi@astroatc.UUCP (Bob Niemi) writes:

> In article <1679@doitcr.doit.sub.org> jungkunz@doitcr.doit.sub.org (Helmut Ju
> >We, the AMSTRAD CPC USER GROUP Munich, would like to state our participation
> >in the sorrow on the death of IRV HOFF, according to John Deakins's mail.
> >May he rest in peace. And may he be enabled to lead some software developers
> >into sane fields again! A lot of work has inspired programmers all over the
> >world. May he be never forgotten!
> >
> >Helmut Jungkunz
> >Chairman

Aw, gee, how long ago was that? One of our local servers barfed
and I didn't get news for a few days. That really IS sad.

> Prior to the advent of personal computing, Irv Hoff was active in amateur
> radio RTTY, and made as many contributions to furtherance of that art as
> he made to PC software. I am not particularly well read in either field,
> but I recall seeing Irv's name often; I suspect a list of his accomplishments
> would be too long to post. I personally benefited from his disk utility
> (I think it was DU), for the Osborne 1.

DU, I believe, was a contribution by Ward Christensen.

> I had the pleasure of but one RTTY QSO with Irv in the mid-to-late 60's.
> His spirit and energy will be hard to replace.

I've only talked with him on the phone. And yes, his spirit and
know-how will be very hard, if not impossible, to replace.

Date: 12 Apr 91 14:24:52 GMT
From: porthos!taichi!whs70@bellcore.bellcore.com
Subject: Most Offensive Scanner
To: info-hams@ucsd.edu

In article <1991Apr11.203057.9022@en.ecn.purdue.edu> ghg@en.ecn.purdue.edu (George

Goble) writes:

>In article <1594@msa3b.UUCP> kevin@msa3b.UUCP (Kevin P. Kleinfelter) writes:
>>I'm now in the market for a scanner covering as much of the "offensive"
>>spectrum as possible; ideally I'd get a scanner which covered the
>>frequencies that are most likely to be restricted. I don't mind making
>>mods if I have to, but I can't handle anything really complex.
>>Any suggested models?
>
>Icom R-9000. DC to Daylight, 30 Khz to 2 Ghz (no holes) in 10 Hz steps,
>1000 mems + spectrum display, all modes. Often called an "Assault Radio".

How much? Is it designed for mobile operation?

>>(When scanners are outlawed, only outlaws will be informed.)

Agreed!!

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-----  
Bill Sohl      (K2UNK)           || email  
Bellcore, Morristown, NJ       || UUCP      bcr!taichi!whs70  
(Bell Communications Research) || or  
201-829-2879 Weekdays         || Internet whs70@taichi.cc.bellcore.com  
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Date: 9 Apr 91 19:12:41 GMT
From: agate!bionet!uwm.edu!bbn.com!nic!mars!gandalf!gandalf.umcs.maine.edu!
steve@ucbvax.berkeley.edu
Subject: Pine State Amateur Radio Club annual ham-fest (Bangor area, Maine)
To: info-hams@ucsd.edu

Pine State Amateur Radio Club annual ham-fest (Bangor area, Maine)

The Pine State Amateur Radio Club will be holding its annual ham-fest
on Saturday June 1 at the Hermon Elementary School in Hermon, Maine.
The event is to be held rain or shine.

The 'fest will feature all the usual hamfest activities, including
equipment swap/sale, door prizes (including a dual band hand held),
license upgrade exams, exams for new hams - including no-code technicians,

Testing begins at 1100.

Doors for the hamfest open at (I think) 0900.

For more information, contact me at one of the addresses below, and
I'll see if I can find an answer for you.

/Steve

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+-----+
|               Steve E. Goldsmith               |
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+-----+
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Date: 12 Apr 91 14:53:39 GMT

From: swrinde!elroy.jpl.nasa.gov!usc!wuarchive!emory!wa4mei!ke4zv!gary@ucsd.edu

To: info-hams@ucsd.edu

References <1991Apr5.144823.2094@ux1.cso.uiuc.edu>, <2701@ke4zv.UUCP>,
<1991Apr9.145118.24707@ux1.cso.uiuc.edu>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)

Subject : Re: Antenna Matching Gedanken Experiment

In article <1991Apr9.145118.24707@ux1.cso.uiuc.edu> sc80@ux1.cso.uiuc.edu (sc Student) writes:

>gary@ke4zv.UUCP (Gary Coffman) writes:

>

>>A transmitter is not a load! There seems to be a general misconception about

>

>Sure it's a load. Try pumping power into the feed line at the antenna end.

>Then measure what

>happens at the transmitter final. That's just what a high VSWR does. That is

>real power being reflected, and it will raise the voltage on the plate or

>collector. That's why transistors are PROTECTED with shut down circuits

>when high VSWR is present.

A transmitter is not a load. Let's try to explain by analogy. If you have an open fire hydrant gushing water represent a transmitter and a guy with a garden hose trying to squirt water into the open hydrant as your reflected power, you can see that the water is totally reflected by the stream coming out of the hydrant. Now the impedance against the water flowing out of the hydrant increases, so without rematching, the flow from the hydrant decreases by exactly the amount that is reflected from the garden hose because the effective pressure required to deliver a given quantity of water has changed. Therefore the total amount of water delivered out of the hydrant, the original gush and the re-reflected squirt from the hose remains

the same. So your statement that the voltage will rise on the plate is correct, *in the absence of retuning*, but this is simply because the impedance presented at the transmitter output has changed. It is not because reflected power is being absorbed by the "load" of the transmitter. By simply retuning the transmitter's output network, or a matchbox, to match the new impedance presented by the line, the voltage on the plate will return to normal.

>>this floating around. Let's see if we can clear it up. In classical
>>transmission line theory textbooks it is common to see a source represented
>>as a generator with a series resistor R_s . This R_s is referred to as the
>>"equivalent source resistance". It is stated that maximum power transfer
>>occurs when the load resistance R_l is equal to R_s . The system is said to
>>be matched under this condition. Now with two resistors of equal value
>>in series with a generator, half the power of the generator is dissipated
>>across each resistor. Therefore if this were a true description of our
>>transmitters, we could never exceed 50% efficiency in delivering power
>>to the load. Half the power would have to be dissipated in the transmitter
>>source resistance R_s . This is totally false, real transmitters have
>>efficiencies well over 50%.

>

>The increased efficiency is usually gained by shortening the ON cycle, such as in
class C. The Q of the circuit then supplies the completion of the the
>cycle. In this "pulse" mode, the tube is ON less than one half the cycle,
>thereby giving higher efficiency. Compare the efficiency of class C, B, and
>A amplifiers.

Right answer to the wrong question. Restating the question, if in a matched transmitter where $R_s=R_l$, and they are in series with the generator, the load, R_l , will receive only half the power produced by the generator while R_s , the purported real impedance of the final, dissipates the other half. This means that the efficiency can never exceed 50% regardless of the duty cycle. A low duty cycle only means that a *given* device can supply more peak power than it's steady state rating. That a matched transmitter cannot deliver more than 50% of it's power to the load is a false statement in a real transmitter because R_s is not a real impedance. It is a fictitious value derived from the instantaneous value of E_p/I_p and represents the operating point of the amplifier, nothing more.

>>So what's the deal? The key here is the word "equivalent". What R_s represents
>>in a real transmitter is the *load-line* of the active device as transformed
>>by the output matching network. This is the *operating point* as defined
>>by the instantaneous E/I of the output device. This is *not* a resistor. It
>>can't dissipate *any* power. To a signal being forced *into* the output
>>of an operating transmitter, it looks like an *open* circuit. Hence we
>>get *total* re-reflection.

Slight correction, looking into the transmitter one doesn't see an exact open circuit, though conjugate match theory says it should be. Instead one

sees an extreme mismatch that for all practical purposes behaves just like an open circuit. Current and voltage in the forward wave are in phase while current and voltage in the reflected wave are 180 degrees out of phase. A perfect conjugate match would behave like a quarterwave shorted stub causing a perfect phase reversal of the reflected current in the re-reflected wave. Nothing is perfect in the real world.

>True, the equivalent resistance is somewhat fictitious, but the power is
>very real, ie. plate voltage times plate current equals DISSIPATION. Try

False statement! Plate voltage times plate current = DC INPUT POWER.
Dissipation = DC input power - RF output power. It is a measure of the
inefficiency of a circuit in converting DC to RF.

>tuning your tube rig to maximum output on CW into a perfectly matched load
>at the antenna. Then mismatch the load to above 3:1 and watch those little
>babies turn red and melt down. That's REAL power being absorbed by a real
>resistor (plate).

That's real *inefficiency* causing increased dissipation because you didn't
retune to match the new impedance at the transmitter output caused by
the 3:1 SWR. Remember that the definition of a transmission line transformer
is a length of line with a SWR other than 1:1, so what you have done is
create a transformer that is presenting an impedance to the transmitter
that it is not tuned for. The correct answer is to retune the transmitter.

>You don't use a matching device (presumably you meant at the transmitter,
>not the antenna) to lower the VSWR on the coax. You have to match the
>transmission line impedance at the antenna to significantly lower the
>VSWR on the line, although back matching at the generator will have a small
>effect - Roger K9ALD

Sorry, I misstated. (Fell into my own trap so to speak) What I was trying
to say was that you can use a matching device *at the transmitter* to
match the impedance presented by the line with other than 1:1 SWR *and*
that any additional coax losses suffered by operating this way will only be
double the coax losses of a flat line. At HF this is totally insignificant,
on the order of .46 db for 100 feet of RG-8. The reason that this is true
is because the *line* is acting as a transmission line transformer in
both directions. Therefore the re-reflected wave will be transformed
exactly the right amount on it's *second* trip up the line to match the
load perfectly.

Gary KE4ZV

Date: 12 Apr 91 15:11:55 GMT

From: swrinde!elroy.jpl.nasa.gov!usc!wuarchive!emory!wa4mei!ke4zv!gary@ucsd.edu
To: info-hams@ucsd.edu

References <1991Apr5.144823.2094@ux1.cso.uiuc.edu>, <2701@ke4zv.UUCP>,
<1991Apr9.125716.5551@wam.umd.edu>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)

Subject : Re: Antenna Matching Gedanken Experiment

In article <1991Apr9.125716.5551@wam.umd.edu> rustyh@wam.umd.edu (Rusty Haddock) writes:

>

>the amplifier will deliver its designed power. Note that if we looked
>into the amplifier we would NOT see 50 ohms but the transistors
>impedance transformed by the matching network. So by presenting

Well almost. If the transistor was operating with a steady DC bias and no drive, this is exactly true. But in an operating amplifier, the constructive and destructive wave interference seen through the conjugate matching network will present a theoretical open circuit to the back wave.

>a load other than 50 ohms to the amplifier we could get more
>power! BUT this different load will be transformed by the output
>network to a load at the transistor that would likely have a
>reactive component and thus reactive current that will cause
>extra dissipation in the device (added to the extra dissipation
>that the smaller real load would present). This may cause destruction
>of the output transistor!!!

Yes! Failure to retune the output matching network to resonance will allow excessive reactive currents to flow and destroy the finals. This is the real cause of complaints that SWR destroys radios. It's not the SWR per se that does the destruction, IT'S THE FAILURE TO RETUNE THE TRANSMITTER that destroys the radio.

Gary KE4ZV

Date: 12 Apr 91 15:53:59 GMT

From: sdd.hp.com!spool.mu.edu!news.cs.indiana.edu!noose.ecn.purdue.edu!
mentor.cc.purdue.edu!mace.cc.purdue.edu!dil@ucsd.edu

To: info-hams@ucsd.edu

References <1594@msa3b.UUCP>, <1991Apr11.203057.9022@en.ecn.purdue.edu>,
<1991Apr12.142452.2046@porthos.cc.bellcore.com>du

Subject : Re: Most Offensive Scanner

In article <1991Apr12.142452.2046@porthos.cc.bellcore.com>, whs70@taichi.uucp (24460-W. H. Sohl(L145)) writes:

> In article <1991Apr11.203057.9022@en.ecn.purdue.edu> ghg@en.ecn.purdue.edu (George Goble) writes:

> >Icom R-9000. DC to Daylight, 30 Khz to 2 Ghz (no holes) in 10 Hz steps,
> >1000 mems + spectrum display, all modes. Often called an "Assault Radio".
>

> How much? Is it designed for mobile operation?

EEB will mail you one for just a little under 5 grand.

Don't you wish you hadn't asked?

Can anyone comment on the Fairmate HP200 or the AR1000? They advertise complete coverage from HF (500 kHz for the former, 8 MHz for the latter) through 1300, except there is a gap from about 600 - 800 MHz. Both are under \$500. For that matter, the Radio Shack PRO-2006 is reportedly easily modifiable for 25-520 and 760-1300 MHz, and it's around \$400.

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Sometimes history repeats itself; sometimes it doesn't. So get good odds.

End of Info-Hams Digest
